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# Indoor WiFi

## 802.11bg



### AWUS036H

- Long range 802.11g 54Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna



### AWUS036EW

- Long range 802.11g 54Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna

## 802.11bgn



### AWUS036NH

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna



### AWUS036NHR v2

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna



### AWUS036NHV

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal stability
- High sensitivity 5dbi antenna



### AWUS036NEH

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna



## AWUS036NF

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna



## U24N

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna

## 802.11abgn



## AWUS051NH v2

- 2.4G/5GHz dual-band radio
- Support 150Mbps wireless
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability



## AWUS052NH

- 2.4G/5GHz dual-band radio
- Support 300Mbps wireless
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability

## 802.11ac/n



## AWUS036AC

- Ultra-fast AC1200 wireless
- High-sensitivity external antenna
- 2.4G/5GHz dual-band radio
- USB 3.0 connectivity



## AWUS036EAC

- Ultra-fast AC1200 wireless
- USB 3.0 connectivity
- 2.4G/5GHz dual-band radio



## AWUS036ACH

- Ultra-fast AC1200 wireless
- USB 3.0 connectivity
- Built-in signal amplifier for longer range, better signal penetration
- 2.4G/5GHz dual-band radio



## AWUS1900

- Ultra-fast AC1900 wireless
- USB 3.0 connectivity
- Built-in signal amplifier for longer range, better signal penetration
- 2.4G/5GHz dual-band radio



## AWUS036ACM

- Ultra-fast AC1200 wireless
- USB 3.0 connectivity
- 2.4G/5GHz dual-band radio



## AWUS036ACHM

- Ultra-fast AC1200 wireless
- USB 3.0 connectivity
- Built-in signal amplifier for longer range, better signal penetration
- 2.4G/5GHz dual-band radio

# Indoor USB WiFi



Model	AWUS 036H	AWUS 036NH	AWUS 036NHR v2	AWUS 036NHV	AWUS 036EW	AWUS 036NEH	AWUS 036NF	AWUS 051NH v2	AWUS 052NH	U24N	AWUS 036AC	AWUS 036EAC	AWUS 036ACH	AWUS 036ACM	AWUS 036ACHM	AWUS 1900
Data-Rate	54Mbps	150Mbps	150Mbps	150Mbps	54Mbps	150Mbps	150Mbps	150Mbps	300Mbps	150Mbps	1200Mbps	1200Mbps	1200Mbps	1200Mbps	1200Mbps	1900Mbps
USB 3.0 Support																
802.11bg	●				●											
802.11bgn	●	●				●				●						
802.11abgn								●								
802.11ac/n																●
External Antenna	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Internal Antenna	X	X	X	X	X	X	●	X	X	X	X	●	X	X	X	X
Output Power	H	H	H	H	N	H	N	H	H	H	N	N	H	H	H	H
Chipset	RTL8187L	RT3070	RTL8188RU	RTL8188EUS	RTL8187L	RT3070	RT5370	RT3572	RT3572	RTL8188RU	RTL8812AU	RTL8812AU	RTL8812AU	MT7612U	MT7612U	RTL8814AU
Windows Driver	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10	XP/Vista/7/8/8.1/10
Mac OSX Driver	10.4/10.5/10.6	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.4/10.5/10.6	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11	10.5/10.6/10.7/10.8/10.9/10.10/10.11
Linux Driver	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Kali Linux Supported	●	●	●	●	●	●	X	●	●	●	●	●	●	X	X	X

\*1 Output Power H : Over : 20dBm / N : Normal Power : upto 20dBm

# Indoor Router



## 802.11bgn



### AIP-W515H / AIP-W525H

- Long range 802.11n 150 Mbps (AIP-W515H)  
Long range 802.11n 300 Mbps (AIP-W525H)
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna
- All-in-One device: Router/access point/WISP router/repeater/WDS service
- Ideal for home/SOHO networking application



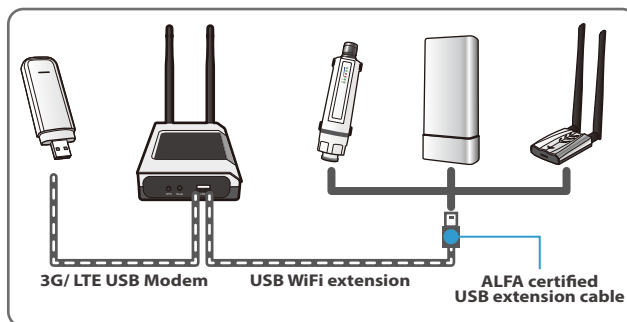
### AP121 / AP121U

- Wide-coverage 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- High sensitivity 5dbi antenna
- AP/Router/Clien/WDS
- Support USB port (AP121U)



### AIP-W525HU

- 802.11n 300Mbps wide-coverage wireless
- Excellent signal reception
- Built-in USB host for 3G/LTE modem, ALFA wireless adapter ideal for camping, yacht Internet access when paired with ALFA outdoor USB CPE



### AIP-W511

- Portable 802.11n 150Mbps wireless
- AP / router / repeater / wireless client / USB LAN Adapter for various scenarios
- Powered via USB interface
- Self-install adapter driver fully compliant with Windows, and Mac OS



### AIP-W512

- Portable 802.11n 150Mbps wireless
- AP / router / repeater / wireless client
- Powered by micro-USB
- Ideal for mobile Internet applications

# Indoor Router



## R36

- Long range 802.11n 150Mbps wireless
- USB host for ALFA wireless adapter & USB modem to extend your network access
- High sensitivity 5dbi antenna



## R36A

- Long range 802.11n 150Mbps wireless
- USB host for ALFA wireless adapter & USB modem to extend your network access
- High sensitivity 5dbi antenna



Included AUSBC-AD  
USB 2.0 Signal Booster Adapter



3G Mobile Function Diagram



ALFA Wireless USB Extender

## 802.11abgn



## AP120C

- Simultaneous 2.4G/5GHz dual-band radio
- Built-in signal amplifier for longer range, better signal penetration
- 802.11 a/b/g/n 600M wireless
- Ideal for hotel room, office network, shopping mall & public transportation Internet access
- Support Gigabit LAN



Ceiling Mount



Ceiling T-rail Mount

## 802.11ac/n



## AC1200R

- Ultra-fast AC1200 wireless
- Simultaneous 2.4G/5GHz dual-band for more devices
- Built-in USB host for 3G/LTE modem, ALFA wireless adapter
- Firewall protection, access control
- DoS attack prevention
- Lag-free HD video streaming, online
- Support Gigabit WAN/LAN



## AC1900R

- Ultra-fast AC1900 wireless
- Simultaneous 2.4G/5GHz dual-band for more devices
- Built-in USB 3.0 host
- Firewall protection, access control
- DoS attack prevention
- Lag-free HD video streaming, online
- Support Gigabit WAN/LAN



## AC2600R (MU-MIMO)

- Ultra-fast AC2600 wireless
- Simultaneous 2.4G/5GHz dual-band for more devices
- Built-in USB 3.0 host
- Firewall protection, access control
- DoS attack prevention
- Lag-free HD video streaming, online
- Support Gigabit WAN/LAN

# Indoor Router



Model	AIP-W515H	AIP-W525H	AIP-W525HU	AIP-W511	AIP-W512	AP121	AP121U	AP120C	R36	R36A	AC1200R	AC1900R	AC2600R	
<b>WiFi Data-Rate</b>	150M	300M	300M	150M	150M	150M	150M	600M	150M	150M	1200M	1900M	2600M	
<b>802.11bgn</b>	●	●	●	●	●	●	●		●					
<b>802.11abgn</b>								●						
<b>802.11ac/n</b>											●	●	●	
<b>Ethernet Speed (Mbps)</b>	10/100	10/100	10/100	10/100	10/100	10/100	10/100	10/100/1000	10/100	10/100	10/100/1000	10/100/1000	10/100/1000	
<b>WAN Ports</b>	1	1	1	1	1	1	1	X	1	1	1	1	1	
<b>LAN Ports</b>	4	4	4	Option	1	1	1	1	1	1	4	4	4	
<b>Antenna</b>	External	External	External	Internal	Internal	External	External	Internal	External	External	External	External	External	
<b>USB Ports</b>	X	X	1	X	X	X	1	X	1	1	2	1	2	
<b>Mode</b>	Router AP Bridge WISP Client adapter Repeater WDS	Router AP Bridge WISP Client adapter Repeater WDS	Router WiFi USB Extender	Router AP Bridge Client adapter (Wire/wireless) Repeater	Router AP Bridge WISP Client adapter WDS	AP Router AP Bridge Client Router Client adapter WDS	AP Router AP Bridge Client Router Client adapter WDS	AP Router AP Bridge Client Router Client adapter WDS	Router AP Bridge WiFi USB Extender WDS	Router AP Bridge WISP Client adapter	Router AP Bridge WISP Client adapter Repeater WDS	Router AP Bridge WISP Client adapter Repeater WDS	Router AP Bridge	Router AP Bridge
<b>Chipset</b>	RTL8196C +RTL8188RE	RTL8196C +RTL8192CE	RTL8196C +RTL8192CE	RTL8196EU +RTL8188ER	RTL8196E +RTL8188ER	AR9331	AR9331	AR9344	RT3050	AR9331	RTL8197D +RTL8192ER +RTL8812AR +RTL8367RB	BCM4708A0 +BCM4360	QCA8064 +QCA9980	
<b>Flash size</b>	2M	4M	8M	4M	4M	8M	16M	32M(Dual image)	8M	8M	8M	16M	256M	
<b>SDRAM size</b>	16M	32M	32M	32M	32M	32M	64M	128M	32M	32M	64M	128M	512M	
<b>Power source</b>	DC power	DC power	DC power	USB power	USB Power	DC power	DC power	DC power	DC power	DC power	DC power	DC power	DC power	
<b>Power Over Ethernet (PoE)</b>	Passive PoE	Passive PoE	Passive PoE	X	X	Passive PoE	Passive PoE	802.3af/at PoE	Passive PoE	Passive PoE	Passive PoE	X	X	
<b>OpenWRT supported</b>	X	X	X	X	X	●	●	●	●	●	●	●	●	

# Cloud 36



## Cloud Management



### Cloud-M

- Outdoor Dual-Band
- 802.11 abgn 2.4GHz+ 5GHz
- 802.3af/at PoE
- External N male antenna connector



### Cloud-C

- Dual-Band 802.11 abgn 2.4GHz+5GHz
- Ceiling/Wall mount design
- 802.3af/at PoE



### Cloud-R

- 802.11n 2.4GHz
- Detachable antenna



### Cloud-ODS

- Outdoor 802.11n 2.4GHz
- Passive PoE 12V
- Integrated antenna



# Outdoor AP



## MatrixPro

- Wide-coverage 802.11abgn 600Mbps wireless
- Field-proven wireless coverage and signal penetration
- External N type Female antenna connector
- Standard 802.3af/at PoE



## N5ac / N5acx

- 802.11ac 5GHz 866Mbps wireless
- Internal directional antenna (N5ac)  
External RP-SMA female connector (N5acx)
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design



## N2 / N2C

- 802.11n 2.4GHz 300Mbps wireless
- Internal directional antenna (N2)  
External RP-SMA female connector (N2C)
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design



## N5 / N5C

- 802.11n 5GHz 300Mbps wireless
- Internal directional antenna (N5)  
External RP-SMA female connector (N5C)
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design

LED Indicator



## R2 / R2x

- 802.11n 2.4GHz 300Mbps wireless
- Internal directional antenna (R2)  
External RP-SMA female connector (R2x)
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design



## R5 / R5x

- 802.11n 5GHz 300Mbps wireless
- Internal directional antenna (R5)  
External RP-SMA female connector (R5x)
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design

# Outdoor AP



## Tube2H

- 802.11n 2.4GHz 150Mbps wireless
- External N type male connector
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design



## Tube2HP

- 802.11n 2.4GHz 150Mbps wireless
- External N type male connector
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design
- Standard 802.3af/at PoE



## Tube2Hs

- 802.11n 2.4GHz 150Mbps wireless
- External RP-SMA female connector
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design



## Tube2HPF

- 802.11n 2.4GHz 150Mbps wireless
- External N type female connector
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design
- Standard 802.3af/at PoE



## Solo-N2H / Solo-N5H

- Long range 802.11n 300Mbps (Solo-N2H)
- Long range 802.11an 300Mbps (Solo-N5H)
- Field-proven wireless coverage and signal penetration
- Built-in high gain, high sensitivity antenna
- Weather-resistant design



## Solo-NSR

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- Built-in high gain, high sensitivity antenna
- Weather-resistant design
- Ideal for wireless signal bridge, wireless Internet access scenarios



## WISP-2

- Long range 802.11n 150Mbps wireless
- Built-in high gain, high sensitivity antenna
- Built-in signal amplifier for longer range, better signal penetration
- Weather-resistant design



## WISP-NSR

- Long range 802.11n 150Mbps wireless
- Built-in high gain, high sensitivity antenna
- Built-in signal amplifier for longer range, better signal penetration
- Weather-resistant design



## G2N / G2NC

- Long range 802.11n 150Mbps wireless
- Field-proven wireless coverage and signal penetration
- Built-in signal amplifier for longer range, better signal penetration
- Built-in high gain, high sensitivity antenna
- Weather-resistant design
- Integrated high-gain directional antenna (G2N)
- External N female antenna connector (G2NC)



## Bridge5 / Bridge5-24

- 802.11n 5GHz 150Mbps wireless
- Support standard 802.3af/at PoE (Bridge5)
- Support 24V Passive PoE (Bridge5-24)
- Integrated 23dBi directional 5GHz antenna
- Built-in signal amplifier for longer range, better signal penetration
- Field-proven wireless coverage and signal stability
- Weather-resistant design



Model	MatrixPro	N2	N2C	N5	N5C	R2	R2x	R5	R5x	N5acx	N5ac	N2s
<b>Operation Mode</b>	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) WDS Bridge
<b>Chipset</b>	AR9344	AR7240+AR9283	AR7240+AR9283	AR7240+AR9280	AR7240+AR9280	AR7240+AR9283	AR7240+AR9283	AR7240+AR9280	AR7240+AR9280	RTL8197D+RTL8812AR	RTL8197D+RTL8812AR	AR9331
<b>Flash</b>	32M(Dual image)	8M	8M	8M	8M	16M	16M	16M	16M	16M	16M	8M
<b>SDRAM</b>	128M	32M	32M	32M	32M	64M	64M	64M	64M	64M	64M	32M
<b>Radio Band</b>	2.4GHz + 5GHz	2.4GHz	2.4GHz	5GHz	5GHz	2.4GHz	2.4GHz	5GHz	5GHz	5GHz	5GHz	2.4GHz
<b>Frequency (MHz)</b>	2412~2485 5150~5825	2412 ~ 2472	2412 ~ 2472	5150 ~ 5865	5150 ~ 5865	2412 ~ 2472	2412 ~ 2472	5150 ~ 5865	5150 ~ 5865	5150 ~ 5825	5150 ~ 5825	2412 ~ 2472
<b>ChannelWidth (MHz)</b>	20/40	20/40	20/40	5/10/20/40	5/10/20/40	20/40	20/40	5/10/20/40	5/10/20/40	20/40/80	20/40/80	20/40
<b>Data-Rate (Mbps)</b>	600	300	300	300	300	300	300	300	300	866	866	150
<b>Technology</b>	11n+11an	11n	11n	11an	11an	11n	11n	11an	11an	11ac	11ac	11n
<b>Internal Directional Antenna</b>	X	●	X	●	X	●	X	●	X	X	●	●
<b>External Antenna</b>	●	X	●	X	●	X	●	X	●	●	X	X
<b>RF Connector</b>	4x N female	X	2x RP-SMA Female	X	2x RP-SMA Female	X	2x RP-SMA Female	X	2x RP-SMA Female	2x RP-SMA Female	X	X
<b>LED Indicator</b>	Power, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	Signal, WAN, LAN, WLAN	X
<b>Output power (dBm)</b>	27	27	27	27	27	27	27	27	27	27	27	20
<b>Ethernet</b>	1x LAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN
<b>PoE</b>	48V	24V	24V	24V	24V	24V	24V	24V	24V	24V	24V	15V
<b>OpenWRT supported</b>	●	X	X	X	X	Option	Option	Option	Option	X	X	X
<b>VLAN</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>IP Rating</b>	IP67	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55

▲ Not official released

# Outdoor AP



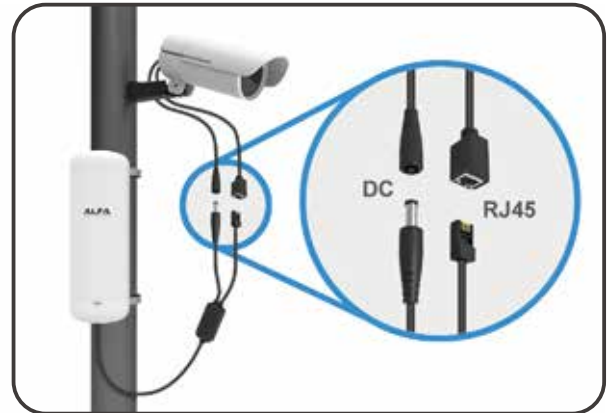
Model	Tube2H	Tube2Hs	Tube2HP	Tube2HPF	G2N	G2NC	Solo-N2H	Solo-N5H	Solo-NSR	WISP-2	WISP-NSR	Bridge5	Bridge5-24	
<b>Operation Mode</b>	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge Client Bridge Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge	AP Bridge AP Router Client Bridge Client Router (WSIP) Client Router (WSIP) WDS Bridge
<b>Chipset</b>	AR9331	AR9331	AR9331	AR9331	RTL8196C+RTL8188RE	RTL8196C+RTL8188RE	AR7240+AR9280	AR7240+AR9280	AR9331	RTL8196C+RTL8188RE	AR9331	AR7240+AR9280	AR7240+AR9280	
<b>Flash</b>	8M	8M	16M	16M	2M	2M	8M	8M	8M	4M	8M	8M	8M	
<b>SDRAM</b>	32M	32M	64M	64M	16M	16M	32M	32M	32M	16M	32M	32M	32M	
<b>Radio Band</b>	2.4GHz	2.4GHz	2.4GHz	2.4GHz	2.4GHz	2.4GHz	2.4GHz	5GHz	2.4GHz	2.4GHz	2.4GHz	5GHz	5GHz	
<b>Frequency (MHz)</b>	2412 ~ 2472	2412 ~ 2472	2412 ~ 2472	2412 ~ 2472	2412 ~ 2472	2412 ~ 2472	2412 ~ 2472	5150 ~ 5865	2412 ~ 2472	2412 ~ 2472	2412 ~ 2472	5150 ~ 5865	5150 ~ 5865	
<b>ChannelWidth (MHz)</b>	20/40	20/40	20/40	20/40	20/40	20/40	20/40	5/10/20/40	20/40	20/40	20/40	5/10/20/40	5/10/20/40	
<b>Data-Rate (Mbps)</b>	150	150	150	150	150	150	300	300	150	150	150	150	150	
<b>Technology</b>	11n	11n	11n	11n	11n	11n	11an	11an	11n	11n	11n	11an	11an	
<b>Internal Directional Antenna</b>	X	X	X	X	●	●	●	●	●	●	●	●	●	
<b>External Antenna</b>	●	●	●	●	X	●	X	X	X	X	X	X	X	
<b>RF Connector</b>	N male	RP-SMA	N male	N female	N female	N female	X	X	X	X	X	X	X	
<b>LED Indicator</b>	LAN/WAN, WLAN,Signal	LAN/WAN, WLAN,Signal	LAN/WAN, WLAN,Signal	LAN/WAN, WLAN,Signal	Power, LAN, WLAN	Power, LAN, WLAN	Power, LAN, WLAN	Power, LAN, WLAN	Power, LAN, WLAN	Power, LAN, WAN,WLAN	X	X	X	
<b>Output power (dBm)</b>	27	27	27	27	30	30	27	27	20	27	20	27	27	
<b>Ethernet</b>	1x LAN/WAN	1x LAN/WAN	1x LAN/WAN	1x LAN/WAN	1x LAN	1x LAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN 1x LAN/WAN	1x LAN/WAN	1x LAN/WAN	
<b>PoE</b>	24V	24V	48V	48V	12V	12V	24V	24V	12V	12V	12V	48V	24V	
<b>Standard 802.3af/af</b>	X	X	●	●	X	X	X	X	X	X	X	●	X	
<b>OpenWRT supported</b>	●	●	●	●	X	X	●	●	●	X	●	●	●	
<b>VLAN</b>	●	●	●	●	X	X	●	●	●	X	●	●	●	
<b>IP Rating</b>	IP65	IP65	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP65	IP65	IP67	IP67	



Connectors need to wrap with Water-Resistant tape.

## DDC2412POE

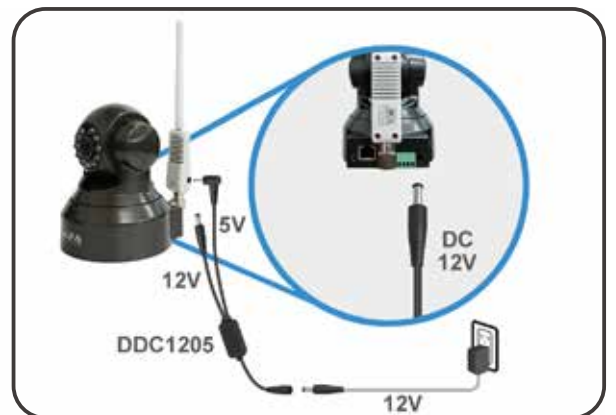
- Input: 24V POE
- Output DC : 12VDC (DC Jack)
- Output Data : LAN



Connectors need to wrap with Water-Resistant tape.

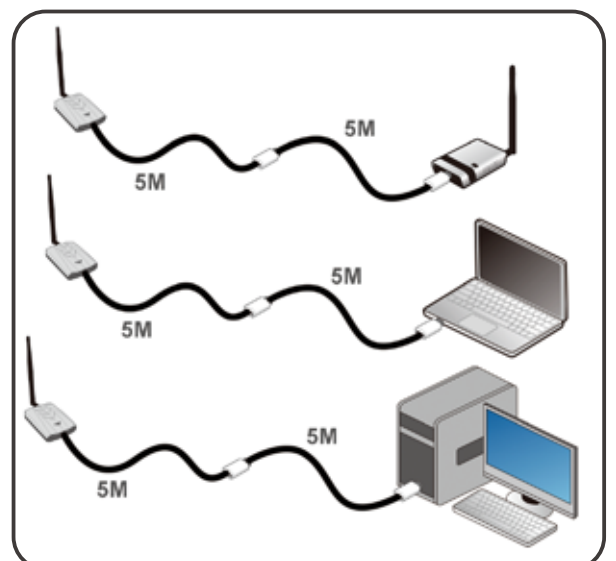
## DDC1205

- Input : 12VDC
- Output : 5VDC + 12VDC
- Design for wireless IP surveillance with APA05



## AUSBC-AD

- Plug & Play
- Boost USB signal
- Extend USB cable length



# Outdoor USB



## Tube-UG/Tube-UGF

- Long-range 802.11g 2.4GHz
- Data-rate: 54Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N male antenna connector (Tube-UG)
- External N female antenna connector (Tube-UGF)



## Tube-UN/Tube-UNF

- Long-range 802.11n 2.4GHz
- Data-rate: 150Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N male antenna connector (Tube-UN)
- External N female antenna connector (Tube-UNF)



## Tube-UV/Tube-UVF

- Long-range 802.11n 2.4GHz
- Data-rate: 150Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N male antenna connector (Tube-UV)
- External N female antenna connector (Tube-UVF)



## Tube-UAC/Tube-UACF

- Long-range 802.11ac 2.4GHz/5GHz
- Data-rate: 600Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N male antenna connector (Tube-UAC)
- External N female antenna connector (Tube-UACF)



## UBDo-g/UBDo-gt

- Long-range 802.11g 2.4GHz
- Data-rate: 54Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N female antenna connector (UBDo-g)
- Integrated high-gain directional antenna (UBDo-gt)



## UBDo-n/UBDo-nt

- Long-range 802.11n 2.4GHz
- Data-rate: 150Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N female antenna connector (UBDo-n)
- Integrated high-gain directional antenna (UBDo-nt)



## UBDo-uv/UBDo-uvf

- Long-range 802.11n 2.4GHz
- Data-rate: 150Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N male antenna connector (UBDo-uv)
- Integrated high-gain directional antenna (UBDo-uvf)



## UBDo-25/UBDo-25f

- Long-range 802.11abgn 2.4GHz/5GHz
- Data-rate: 150Mbps
- Build-in signal amplifier for longer range and better signal penetration
- External N male antenna connector (UBDo-25)
- Integrated dual-band high-gain directional antenna (UBDo-25f)



## UN-G

- Long-range 802.11g 2.4GHz
- Data-rate: 54Mbps
- Build-in signal amplifier for longer range and better signal penetration
- Integrated high-gain directional antenna



## UN-N

- Long-range 802.11n 2.4GHz
- Data-rate: 150Mbps
- Build-in signal amplifier for longer range and better signal penetration
- Integrated high-gain directional antenna



## UN-AC

- Long-range 802.11ac 2.4GHz/5GHz
- Data-rate: 600Mbps
- Build-in signal amplifier for longer range and better signal penetration
- Integrated high-gain directional antenna

## Recommend Accessory



## AUSBC-AD

- USB 2.0 signal booster adapter
- USB A-Type male to USB A-Type female

# WiFi Amplifier



## APA05

- PEN Booster 2.4GHz 800mW
- 802.11b/g/n Booster
- Input : RP-SMA male
- Output : RP-SMA female
- Power source : DC 5V



## APAG05PoE

- 2.4GHz 2Watt
- Input : N female
- Output : N female
- Power source : PoE 48V



## APAG05-2

- 2.4GHz 2Watt
- Input : N female
- Output : N female
- Power source : coaxial cable  
DC 12V



## APA06-1

- 2.4GHz 1000mW
- 802.11b/g/n Booster
- Input : RP-SMA female
- Output : RP-SMA female
- Power source: DC 5V



# Outdoor Antenna



## 2.4GHz



### Omni

AOA-2405TM	5dBi	AOA-2409TM	9dBi	AOA-2408	8dBi
AOA-2405TF	5dBi	AOA-2409TF	9dBi	AOA-2410	10dBi
AOA-2405TFL	5dBi	AOA-2409TFL	9dBi	AOA-2412	12dBi
AOA-2405TS	5dBi	AOA-2409TS	9dBi	AOA-2415	15dBi
AOA-2408M	8dBi	AOA-2410M	10dBi		



### Panel

APA-L2412	12dBi
APA-L2414	14dBi
APA-L2419	19dBi



### Grid

AGA-2424T	24dBi
-----------	-------

## 5GHz



### Omni

AOA-5808M	8dBi
AOA-5809M	9dBi
AOA-5810M	10dBi
AOA-5810	10dBi
AOA-5812	12dBi
AOA-5815	15dBi



### Grid

AGA-5828T	28dBi
-----------	-------

# Outdoor Antenna

## Dual-Band (2.4GHz+5GHz)



### Omni

AOA-2458-59-TS	2.4GHz:5dBi 5GHz:9dBi
AOA-2458-59-TF	2.4GHz:5dBi 5GHz:9dBi
AOA-2458-59-TM	2.4GHz:5dBi 5GHz:9dBi



### Panel

APA-L2458M912	2.4GHz:9dBi 5GHz:12dBi
---------------	---------------------------

## MIMO



### Panel

2.4GHz		5GHz	
APA-L2414M	14dBi	APA-L5814M	14dBi
APA-L2419M	19dBi	APA-L5823M	23dBi
2.4+5GHz			
APA-L2458M912	2.4GHz:9dBi 5GHz:12dBi		



### Dish

5GHz	
ADA-5825M	25dBi
ADA-5832M	32dBi



### Sector

5GHz	
ASA-5819M-120	19dBi

## LTE



ADA-LTE-P
680~960MHz:3dBi 1710~2700MHz:5dBi



ADA-LET-M
680~960MHz:3dBi 1710~2700MHz:5dBi

## Plastic Omni

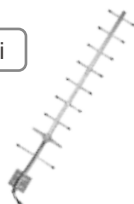


2.4+5GHz	
AOA-2458-24S	2.4GHz:2dBi 5GHz:4dBi
2.4GHz	
AOA-2405S	5dBi
5GHz	
AOA-5805S	5dBi

## 900MHz



AOA-909	9dBi
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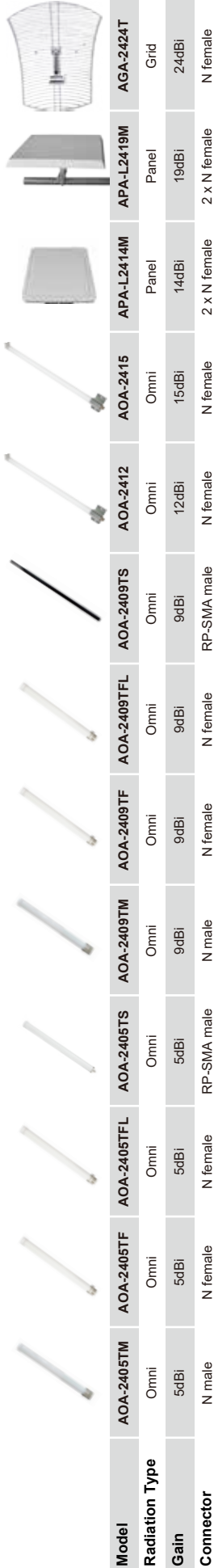


AYA-9012	12dBi
----------	-------

## Accessory

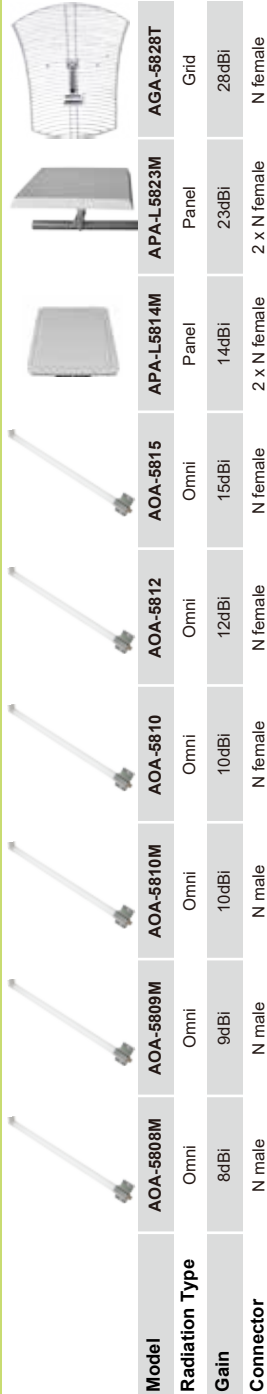


## 2.4GHz



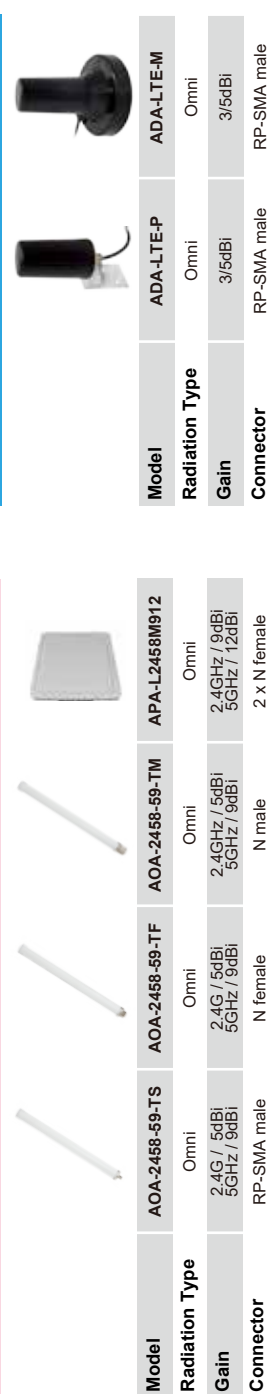
Model	AOA-2405TM	AOA-2405TF	AOA-2405TFL	AOA-2405TS	AOA-2409TM	AOA-2409TF	AOA-2409TFL	AOA-2409TS	AOA-2412	AOA-2415	APA-L2414M	APA-L2419M	AGA-2424T
<b>Radiation Type</b>	Omni	Omni	Omni	Omni	Omni	Omni	Omni	Omni	Omni	Omni	Panel	Panel	Grid
<b>Gain</b>	5dBi	5dBi	5dBi	5dBi	9dBi	9dBi	9dBi	9dBi	12dBi	15dBi	14dBi	19dBi	24dBi
<b>Connector</b>	N male	N female	N female	RP-SMA male	N male	N female	N female	RP-SMA male	N female	N female	2 x N female	2 x N female	N female

## 5GHz



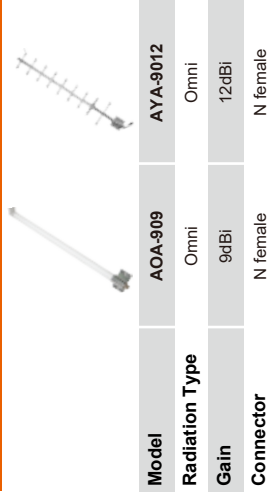
Model	AOA-5808M	AOA-5809M	AOA-5810M	AOA-5810	AOA-5812	AOA-5815	APA-L5814M	APA-L5823M	AGA-5828T
<b>Radiation Type</b>	Omni	Omni	Omni	Omni	Omni	Omni	Panel	Panel	Grid
<b>Gain</b>	8dBi	9dBi	10dBi	10dBi	12dBi	15dBi	14dBi	23dBi	28dBi
<b>Connector</b>	N male	N male	N male	N female	N female	N female	2 x N female	2 x N female	N female

## Dual-Band (2.4GHz+5GHz)



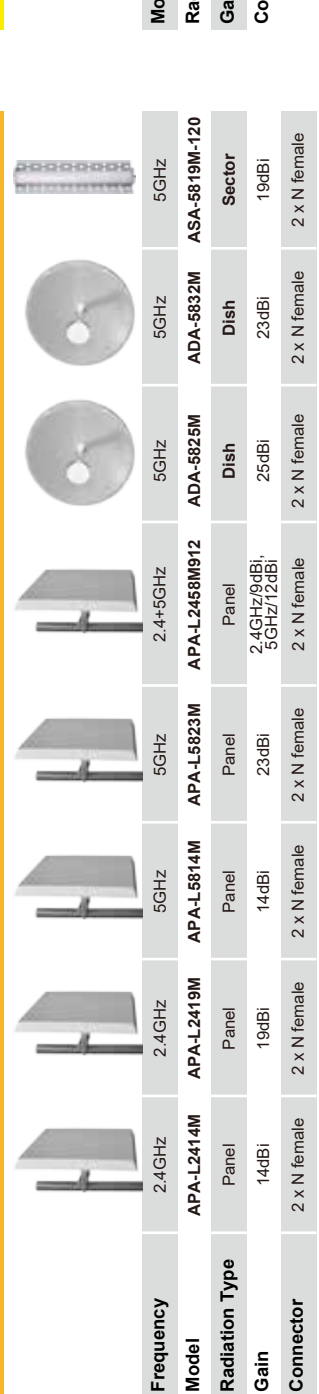
Model	AOA-2458-59-TS	AOA-2458-59-TF	AOA-2458-59-TM	APA-L2458M912	ADA-LTE-P	ADA-LTE-M
<b>Radiation Type</b>	Omni	Omni	Omni	Omni	Omni	Omni
<b>Gain</b>	2.4G / 5dBi 5GHz / 9dBi	2.4G / 5dBi 5GHz / 9dBi	2.4GHz / 5dBi 5GHz / 9dBi	2.4GHz / 9dBi 5GHz / 12dBi	3/5dBi	3/5dBi
<b>Connector</b>	RP-SMA male	N female	N male	2 x N female	RP-SMA male	RP-SMA male

## 900MHz



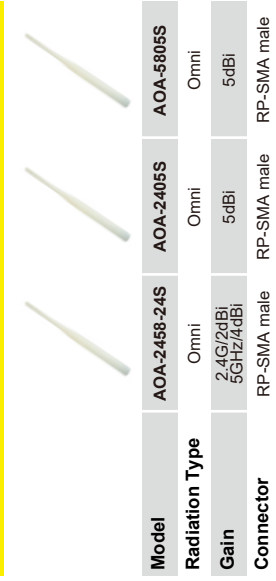
Model	AOA-909	AYA-9012
<b>Radiation Type</b>	Omni	Omni
<b>Gain</b>	9dBi	12dBi
<b>Connector</b>	N female	N female

## MIMO



Frequency	2.4GHz	2.4GHz	5GHz	5GHz	2.4+5GHz	5GHz	5GHz
<b>Model</b>	APA-L2414M	APA-L2419M	APA-L5814M	APA-L5823M	APA-L2458M912	ADA-5832M	ASA-5819M-120
<b>Radiation Type</b>	Panel	Panel	Panel	Panel	Panel	Dish	Sector
<b>Gain</b>	14dBi	19dBi	14dBi	23dBi	2.4GHz/9dBi, 5GHz/12dBi	23dBi	19dBi
<b>Connector</b>	2 x N female	2 x N female	2 x N female	2 x N female	2 x N female	2 x N female	2 x N female

## Plastic Omni



Model	AOA-2458-24S	AOA-2405S	AOA-5805S
<b>Radiation Type</b>	Omni	Omni	Omni
<b>Gain</b>	2.4G/2dBi 5GHz/4dBi	5dBi	5dBi
<b>Connector</b>	RP-SMA male	RP-SMA male	RP-SMA male

# Indoor Antenna



## Dual-Band (2.4GHz+5GHz)



### APA-M25

- DualBand Indoor Antenna
- 2.4GHz 8dBi
- 5GHz 10dBi
- RP-SMA Male Connector



### ARS-NT5C

- DualBand Indoor Antenna
- 2.4GHz 3dBi
- 5GHz 5dBi
- RP-SMA Male Connector

## 2.4GHz



### APA-M04

- 2.4GHz 7dBi Indoor Panel Antenna
- RP-SMA Male Connector



### ARS-N05

- 2.4GHz 5dBi PR-SMA Male Connector



### ARS-AS01 (Magnet base)

- 1M Cable
- RP-SMA Connector



### ARS-N18

- 2.4GHz 8dBi Dipole Antenna
- RP-SMA Male Connector



## ARS-N19

- 2.4GHz 9dBi Dipole Antenna
- RP-SMA Male Connector



## ARS-N19CW

- 2.4GHz Dipole Antenna 9dBi
- N male Connector



## ARS-N19W

- 2.4GHz 9dBi Dipole Antenna
- RP-SMA Male Connector



## ARS-N19TNC

- 2.4GHz Dipole Antenna 9dBi
- RP-TNC Male Connector

## LTE



## APA-M252706

- 2500~2700MHz 6dBi Indoor Panel Antenna
- RP-SMA Male Connector

# Power Over Ethernet



## PSE



### PSE-1000GU

- 802.3at 30Watt Gigabit PSE Adapter
- Input : AC100V~240V
- UL certificated



### APOE48V-1G

- Input: AC 100V~240V
- Output : 48V 0.4A
- Support Gigabit LAN
- Power LED indicator



### APOE2410

- Input : AC 100V~240V
- Output : 24V 1A
- Power LED indicator



### APOE2405

- Input : AC 100V~240V
- Output : 24V 0.5A
- Power LED indicator



### APOE1508

- Input : AC 100V~240V
- Output : 15V 0.8A
- Power LED indicator



### APOE48V-10G

- Input : AC 100V~240V
- Output : 48V 0.4A
- Support 10Gigabit LAN
- Power LED indicator



## DDC-4824PoE

- Redundant Dual-Input DC to DC
- 48VDC to 24VDC
- Gigabit LAN



## DDC-2412PoE

- Input: 24V POE
- Output DC : 12VDC (DC Jack)
- Output Data : LAN

## Passive PoE Adapter



## APOE01

- Base Unit for Power over Ethernet
- PoE Injector
- Power LED Indicator



## APOE02

- Wall mount supported
- Power LED indicator
- PoE Injector



## APOE03

- Wall mount supported
- Power LED indicator
- Redundant PoE



## APOE03G

- Wall mount supported
- Power LED indicator
- Gigabit LAN
- Power by DC jack or Terminal Block connector



## APOE03GS

- Wall mount supported
- Power LED indicator
- Gigabit LAN
- Surge Protection
- Power by DC jack or Terminal Block connector



## APOE03GR

- Wall mount supported
- Power LED indicator
- Gigabit LAN
- Reset button
- Power by DC jack or Terminal Block connector



## APOE08

- 8 Ports Passive PoE Injector
- Simple Power up 8 Passive PoE devices by one power source
- Power by DC jack or Terminal Block connector
- Switch On/Off button to save electricity while not use
- Application use for AP, IP camera, IP phone



## APOE08 Lite

- 8 Ports Passive PoE Injector
- Simple Power up 8 Passive PoE devices by one power source
- Power by DC jack or Terminal Block connector
- Application use for AP, IP camera, IP phone

# Power Over Ethernet



## APOE08G

- 8 Ports Passive Gigabit PoE Injector
- Simple Power up 8 Passive Gigabit PoE devices by one power source
- Power by DC jack or Terminal Block connector
- Application use for AP, IP camera, IP phone

## 802.3af/at PD



## PD-1000D

- PoE Splitter
- 5V / 9V / 12V / 18V adjustable Output Power
- Input : RJ45 In (Data + Power)
- Output : DC Jack Out (Power) RJ45 Out (Data)



## PD-1000T

- 30Watt PoE Splitter
- 12V Output Power
- Input : RJ45 In (Data + Power)
- Output : DC Jack Out (Power) RJ45 Out (Data)



## PD-1000TR-24

- 30Watt PoE Splitter
- 24V Output Power
- Input : RJ45 In (Data + Power)
- Output : RJ45 Out (Data + Power)



## PD-1000R

- PoE Splitter
- 5V / 9V / 12V / 18V adjustable Output Power
- Input : RJ45 In (Data + Power)
- Output : RJ45 Out (Data + Power)

## 802.3af/at PD Module



## PD-1001

- Isolation
- Output 12V



## PD-1002

- Isolation
- Output 12V



## PD-1003

- Isolation
- Output 12V

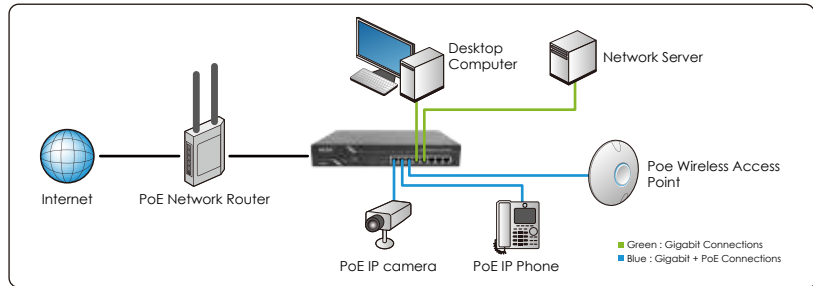


## PoE Switch



### APS08G

- 8-Port Gigabit 802.3af PoE Desktop Switch
- Ultra-Fast Gigabit speed, Rapid Data Transmission
- Plug & Play Deployment, NO Expertise Required
- Fanless, Rugged & Reliable Design
- Real Time LED Indicators
- 802.3af/at Power over Ethernet compliant, Max. 30W per port
- Fit on Desktop or Bring It to Rackmount



## PoE Cable



### AFA-1

- Passive PoE
- Allows device to be PoE Ready



### AFA-1-C

- Passive PoE UTP Y-Cable - 10M
- Input DC dimension: 2.1/5.5mm



### AFA-1-C-15

- Passive PoE UTP Y-Cable - 15M
- Input DC dimension: 2.1/5.5mm



### AFA-1-C-20

- Passive PoE UTP Y-Cable - 20M
- Input DC dimension: 2.1/5.5mm



### AFA-1-C-30

- Passive PoE UTP Y-Cable - 30M
- Input DC dimension: 2.1/5.5mm











### AFA-1-C-50










- Passive PoE UTP Y-Cable - 50M
- Input DC dimension: 2.1/5.5mm

# Power Over Ethernet

## PSE

							
<b>Model</b>	PSE-1000GU	APOE48V-1G	APOE2410	APOE2405	APOE1508	APOE48V-10G	DDC-4824PoE
<b>Standard</b>	802.3af/at						
<b>Passive</b>	●						
<b>Ethernet Speed</b>	10/100/1000Mbps	10/100/1000Mbps	10/100Mbps	10/100Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100Mbps
<b>Input Voltage (AC)</b>	100 ~ 240V	100 ~ 240V	100 ~ 240V	100 ~ 240V	100 ~ 240V	-	-
<b>Input Voltage (DC)</b>	-	-	-	-	-	36 ~ 58V	24V
<b>Output Voltage (DC)</b>	45 ~ 57V	48V	24V	24V	15V	48V	12V
<b>Max. Power Output (Watt)</b>	30W	24W	24W	12W	12W	17W	12W

## Passive PoE Adapte

								
<b>Model</b>	APOE01	APOE02	APOE03	APOE03G	APOE03GS	APOE03GR	APOE08 Lite	APOE08G
<b>Ethernet Speed</b>	10/100Mbps	10/100Mbps	10/100Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100Mbps	10/100/1000Mbps
<b>PoE port number</b>	1	1	1	1	1	8	8	8
<b>Lightning Protector</b>	x	x	x	●	●	x	x	x
<b>On/Off button</b>	x	x	x	x	x	●	x	x
<b>Reset button</b>	x	x	x	x	●	x	x	x
<b>DC Input Connector Type</b>	DC-Jack	DC-Jack	DC-Jack/Terminal block	DC-Jack/Terminal block	DC-Jack/Terminal block	DC-Jack/Terminal block	DC-Jack/Terminal block	DC Jack/Terminal block

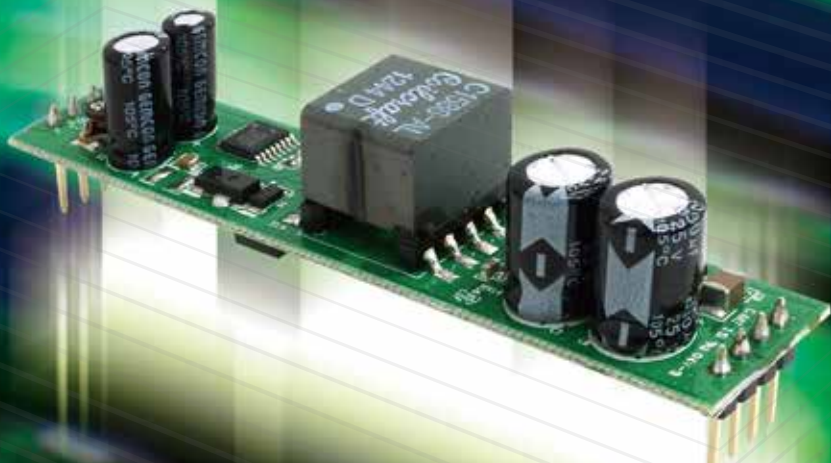
## PD Module

						
<b>Model</b>	PD-1000D	PD-1000T	PD-1000TR-24	PD-1000R	PD-1001	PD-1002
<b>Standard</b>	802.3af/at					
<b>Ethernet Speed</b>	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	802.3at	802.3at
<b>Input Voltage (DC)</b>	48V~56V from PSE	48~56V from PSE	48~56V from PSE	48V~56V from PSE	12V	12V
<b>Output Voltage (DC)</b>	5/9/12/18V selectable	12V	24V	5/9/12/18V selectable	24W	24W
<b>Max. Power Output (Watt)</b>	20W	30W	30W	20W	●	●
<b>Input interface</b>	RJ45	RJ45	RJ45	RJ45		
<b>Output interface</b>	Power: DC Jack Data: RJ45	Power: DC Jack Data: RJ45	Power: RJ45 Data: RJ45	Power: RJ45 Data: RJ45		

## PoE Switch

						
<b>Model</b>	APS08G	AFA-1	AFA-1-C	AFA-1-C-15	AFA-1-C-20	AFA-1-C-30
<b>PoE Standard</b>	802.3af/at					
<b>Cable Length</b>		15cm	10M	15M	20M	30M
<b>Input DC Jack Dimension</b>		2.1/5.5 for Jack/Plug	2.1/5.5mm	2.1/5.5mm	2.1/5.5mm	2.1/5.5mm

# Embedded AP / Router Board / Module



## AP96

- Atheros AR7161
- 16MB Flash, 128MB SDRAM
- Mini PCI Slot x 3
- Mini PCI-e Slot x 1
- Micro SD card Slot
- SIM card Slot
- Input: 48V PoE/DC12V
- Gigabit x 2



## Hornet-SHB

- Atheros AR9331
- IEEE 802.11b/g/n
- Input: 24V PoE
- RP-SMA Female



## Hornet-UB

- Atheros AR9331
- IEEE 802.11b/g/n
- USB x 1
- Input: DC12~18V/12~18V PoE



## AP120C PCBA

- AR9344
- IEEE 802.11a/b/g/n
- Input: DC12V/48V PoE
- Standard 802.3af/at



## AIP-W502U

- Ralink RT3050
- IEEE 802.11b/g/n
- DC12V/12V PoE
- Support USB



## N5 PCBA

- Atheros AR7240+AR9280
- IEEE 802.11a/n
- 8MB Flash
- 32MB SDRAM
- MMCX x 2
- LAN Ports x 2
- Input: 24V PoE

# Embedded AP / Router Board / Module



## N2 PCBA

- Atheros AR7240+AR9283
- IEEE 802.11b/g/n
- 8MB Flash
- 32MB SDRAM
- MMCX x 2
- LAN Port x 2
- Input: 24V PoE



## N5ac PCBA

- Realtek RTL8197D
- IEEE 802.11ac
- 16MB Flash
- 64MB SDRAM
- MMCX x 2
- LAN Port x 2
- Input: 24V PoE

## Embedded Module



## MB92M

- Atheros AR9220
- IEEE 802.11a/b/g/n
- MMCX x 2



## AWPCI085ALR

- Atheros AR5414
- IEEE 802.11an
- MMCX

## PoE Module



## PD-1000DM Module

- IEEE802.3af/at
- Gigabit
- 5/9/12/18V adjustable output



## PD-1000TM Module

- IEEE802.3af/at
- Gigabit
- Output: 24V 30Watt

# Outdoor Enclosure Solution / Accessory



**AWAP020**  
Aluminum Enclosure  
• IP67

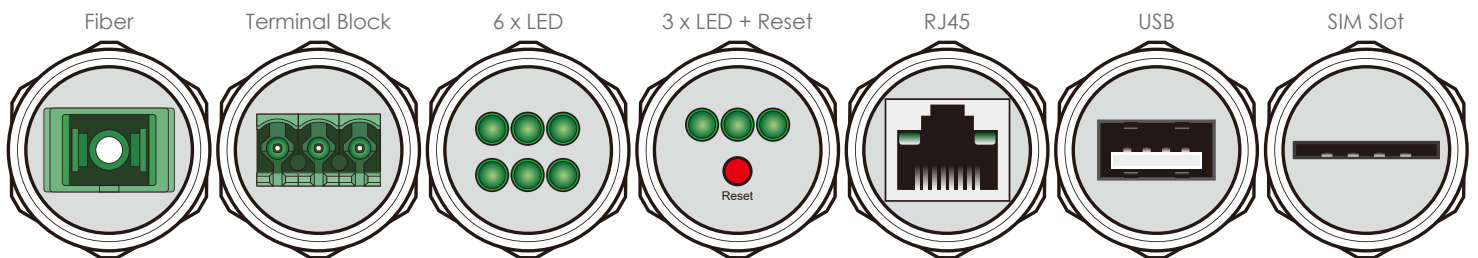


**OE-1**  
Aluminum Enclosure  
• IP67



**ODC**  
Plastic Enclosure  
• IP67

## Waterproof Connector



## Lightning Protector



**ALR62NF**  
• N Female / N Femal



**ALR06**  
• N female to N male



**Ground wire**

# Outdoor Enclosure Solution

**WaterProof Kits V4-RJ**



**WaterProof Kits V4-RJS**



**WaterProof Kits V4-USB**



**WaterProof Kits V4-Fiber-SC**



**WaterProof Kits V4-T**



**WaterProof Kits V3-LR**



**N-Female to IPEX**

- RG178



**PR-SMA Female to IPEX**

- 1.13 cable



**N-male to RP-SMA male**

- CFD 200



**N-Female to MMCX**

- RG316



**RP-SMA Female to MMCX**

- RG178 / RG316



**N-male to N-male**

- CFD 400



## AUSBC-5M

- USB2.0 ExtensionCable 5M



## AUSBC-10M

- USB2.0 ExtensionCable 10M



## AUSBC-15M

- USB2.0 ExtensionCable 15M



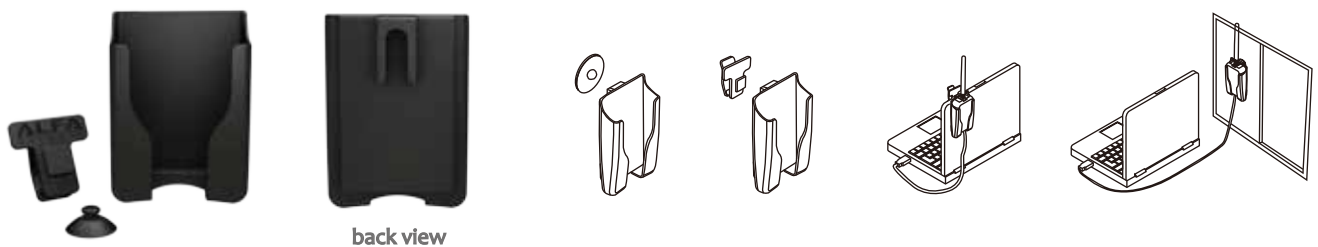
## AUSBC-20M

- USB2.0 ExtensionCable 20M



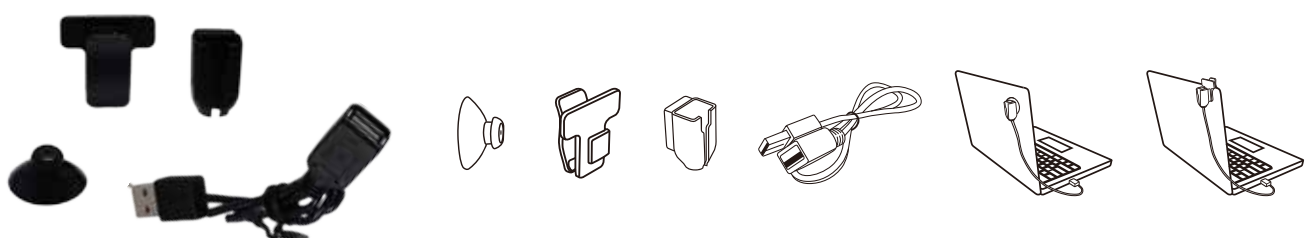
## U-Mount

- Clip, Holder, Suction Cup



## USB Cable Set

- Clip, Holder, Suction Cup
- 46cm USB Type A male to USB Type A Female Cable





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